NAS Application of Real-Time Monitoring Workshop

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Offshore Operators Committee (OOC)
OOC Overview

- Non-profit technically driven industry organization (est. 1948)
- Operators and critical service contractors (~140)
- US Gulf of Mexico & Atlantic focused
Industry Request for Clarity for BSEE’s Intent with RTM

- RTM on site or remotely?
- Safety Focus?
  - Confirmation of barriers & controls
  - Well site condition (monitoring & trending)
- Reduced BSEE Inspection Burden?
  - Should be separate “remote inspection” effort
- BOP health monitoring?
  - Redundancy (not 24/7)
Fact Comparison

Drilling Operations
- ~50 Rigs Operating
- Dynamic (well construction stage driven) operations
- Diverse organization driven systems in use
- Discontinuous specialized activities
- Variable site conditions (MODUs)

Production Operations
- 3000+ Facilities
- 3 to 125-miles offshore
- Steady-state operations
- Well developed safety systems in place
- More consistent activities
- Fixed site conditions
RTM Considerations

**Drilling Operations**
- Remote RTM requirements need to be robustly evaluated
  - Impact on diverse complex risks, companies, equipment, systems
  - All operations must be evaluated carefully to guard against unintended consequences
  - Human factors must be evaluated

**Production Operations**
- Remote RTM requirements need to be thoughtfully evaluated
  - Diversity in facility type and systems
  - Wide range of production rates
  - Wide range of economic viability points
Should RTM be a Regulatory Requirement?

- No, it should not be a regulatory requirement
- 24/7 remote RTM is currently the exception and not the norm for both drilling and production operations
- RTM Technology Availability
  - The technology is available
  - Use: support individual operator business processes
- RTM Impact on Decision Making
  - On-site control (not remotely)
  - Remove UWA as each operator is required to define UWA through SEMS. Instead recommend – Without clear protocols and procedures RTM may introduce uncertainty in decision-making
- Any requirement should be coupled with clear understanding of what data, who looks at it, and how is it used?
BSEE RTM Requirement Impact on Membership

- Would impact current RTM application within industry
- Members would have to carefully evaluate impact to their management systems
- Members could be driven to modify their internal procedures and management systems
- Members could be driven to modify their operating strategy on the US OCS
  - Could have significant economic impacts to smaller operators and change competitiveness of OCS operations
Advice from Membership on BSEE RTM Requirements

- Must have clear understanding of BSEE intent with RTM requirements
  - Use by operator to improve safety
  - Use by regulator for oversight
  - Use for forensics

- Carefully consider requirement impact on labor pool in the industry and regulator

- Unintended consequences can be major, thus have robust data to provide the foundation for any new requirements
  - BSEE discussion narrowly focused on data set, not on use
  - Third party RTM is focused on data quality / streaming and not operational interpretation or analysis for decision making

- Industry needs to understand BSEE’s view that RTM will improve safety with drilling & production operations (from BSEE study interest areas)
  - What are the value propositions for drilling and production separately?
  - What data?
  - How is the data used?
  - Impact to people, processes and systems?
Trade Association Support in Standardizing Needs

- **Industry Value**
  - Function as a forum for dialogue
  - Sharing hub for safety related value of RTM
    - Example: interval trending (fingerprinting)
  - Coordinate joint studies and efforts in RTM research

- **Regulator Value**
  - Coordinate information gathering & dialogue of RTM learnings
  - Cooperate on RTM research
  - Conduit for dialogue in evaluating the RTM risks
  - Conduit for identification of unintended consequences of proposed RTM requirements
Time Frame for Industry-Wide Adoption of RTM

Today
- Used in drilling & production operations (on-site = common, off-site = operation/operator/facility specific)
- Wide variety of RTM application and data sets
- Wide variety of company-specific management system integration of RTM
- Rare use of 24/7 RTM centers, centers not necessary based on current use

Needs (in progress)
- Need for sharing of RTM safety impact
- Need for consensus understanding of RTM aspects that can increase safety
- Need for regulator expertise in RTM aspects being required of industry

Future
- Value added safety components of RTM will be adopted by industry
- The more valuable the application type of RTM the faster the industry will adopt it
OOC Recommendations

- Robust understanding of RTM components that add benefits and produce a positive impact on safety
- Careful determination of RTM requirements that may induce significant unintended consequences
- Coordinated ownership of RTM requirements between Industry and Regulators
- RTM is an evolving science, thoughtful system for regulator requirements to remain relevant
- Performance oriented RTM requirements offer best hope of achieving regulator and industry goals in RTM
- Current Well Control Proposed Rule has timeline requirements for RTM technology, this may drive use of technology that is not fit for purpose or ready for full implementation
  - Introduces compliance risk
  - Introduces uncertainty
Thank You

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